

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-8. (cancelled)

9. (currently amended) An apparatus for use in a wellbore, comprising:
an outer housing;
an electrical device operably associated with the housing;
a connector retained within the housing and comprising:
a body with a pair of axial ends;
a conductive element retained within the body and interconnected with the electrical device and extending through at least one of said axial ends; and
a circumferential channel adapted to capture fluid therewithin, the fluid residing within the circumferential channel.

10. (Previously presented) The apparatus of claim 9 further comprising an electrical pin connector associated with the conductive element that electrically connects the conductive element with an external conductor.

11. (cancelled).

12. (currently amended) An apparatus for use in a wellbore, comprising:
an outer housing;

an electrical device operably associated with the housing;
a connector retained within the housing, the connector including a body with a pair of axial ends and a circumferential channel adapted to capture fluid therewithin, the fluid residing within the circumferential channel;
a conductive element retained within the body and interconnected with the electrical device and extending through at least one of said axial ends; and a pair of seals disposed upon the body to preclude fluid from flowing from between the housing and the body.

13. (currently amended) The apparatus of claim 9 An apparatus for use in a wellbore, comprising:

an outer housing;

an electrical device operably associated with the housing;

a connector retained within the housing, the connector including a body with a pair of axial ends;

a conductive element retained within the body and interconnected with the electrical device and extending through at least one of said axial ends; and a pair of seals disposed upon the body to preclude fluid from flowing from between the housing and the body, wherein the outer housing defines two interior chambers for housing electronic components and an axial passage that interconnects the two chambers and wherein the connector is retained within the axial passage.

14. (Previously presented) The apparatus of claim 13, wherein the housing defines a lateral passage from the axial passage to an exterior radial surface of the housing.

15. (currently amended) An apparatus for use in a wellbore, comprising:
an outer housing;
an electrical device operably associated with the housing;
a connector retained within the housing and comprising:
a body with a pair of axial ends;
a conductive element retained within the body and interconnected with the electrical device and extending through at least one of said axial ends;
a circumferential channel adapted to capture fluid surrounding the body, the fluid residing within the circumferential channel; and
a sensor element is disposed within the channel.

16. (Previously presented) The apparatus of claim 13 wherein the axial passage is defined off-center from a central axis of the housing.

17. (currently amended) A method of providing fluid sealing and electrical connections within a well tool having an interior chamber comprising:
providing a first electronic component within the interior chamber;
associating a second electronic component with an exterior of the well tool; and
connecting the first and second electronic components with a connector; and

capturing fluid with a circumferential channel surrounding the connector, the fluid residing within the circumferential channel.

18. (Previously presented) The method of claim 17 further comprising establishing an electrical connection between the second electronic component and the connector .

19. (Previously presented) The method of claim 18 further comprising establishing an electrical connection between the connector and an electronic component housed within the interior chamber.

20. (Cancelled).

21. (previously presented) The method of claim 17 wherein the second electronic component comprises a sensor.

22. (currently amended) A side entry leak protector connector assembly comprising: a generally cylindrical body having two axial ends and a circumferential outer surface, a circumferential channel being formed in the outer surface to capture fluid, the fluid residing within the circumferential channel; and a conductive element that is electrically isolated and sealed within the body, the conductive element providing a first electrical interconnection at the circumferential outer surface and a second electrical connection at an axial end.

23. (cancelled)

24. (previously presented) The side entry leak protector connector assembly of claim 22 wherein the body further defines an axial passage through which additional wiring may be disposed.

25. (previously presented) The side entry leak protector connector assembly of claim 22 wherein the conductive element is electrically isolated and sealed within the body by glass-sealing.

26. (Previously presented) The side entry leak protector connector assembly of claim 22 further comprising a sensor disposed upon the outer surface of the body and in electrical connection with the first electrical interconnection.

27. (Previously presented) The side entry leak protector connector assembly of claim 22 further comprising a seal upon the outer radial surface of the body.

28. (previously presented) The apparatus of claim 9 wherein the connector further comprises a sealing encasing the conductive element within the body to electrically isolate the conductive element.